

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(43) 国际公布日:

2004年12月2日(02.12.2004)

PCT

(10) 国际公布号:

WO 2004/104421 A1

- (51) 国际分类号: F04C 18/02
- (21) 国际申请号: PCT/CN2004/000469
- (22) 国际申请日: 2004年5月11日(11.05.2004)
- (25) 申请语言: 中文
- (26) 公布语言: 中文
- (30) 优先权:
03113459.9 2003年5月11日(11.05.2003) CN
- (71)(72) 发明人/申请人: 周劲松(ZHOU, Jinsong) [CN/CN]; 周广成(ZHOU, Guangcheng) [CN/CN]; 中国江苏省徐州市纺南小区37-1-301室, Jiangsu 221006 (CN).
- (74) 代理人: 隆天国际知识产权代理有限公司(LUNGTIN INTERNATIONAL INTELLECTUAL PROPERTY AGENT LTD.); 中国北京市朝阳区慧忠路5号远大中心B座18层, Beijing 100101 (CN).
- (81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR,

HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

- (84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO(BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

根据细则4.17的声明:

- 关于申请人在国际申请日有权申请并被授予专利(细则4.17(ii))对所有指定国

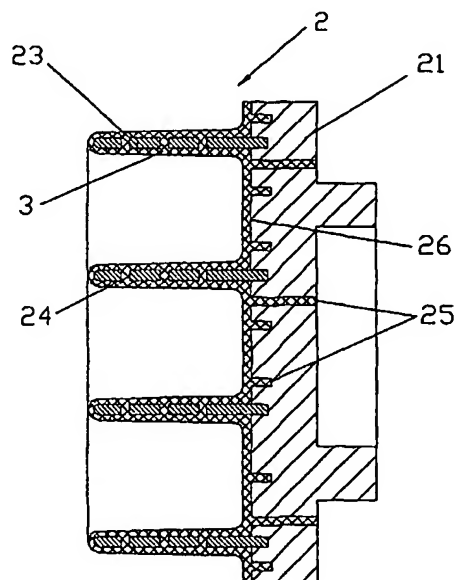
本国际公布:

- 包括国际检索报告。

所引用双字母代码和其它缩写符号, 请参考刊登在每期PCT公报期刊起始的“代码及缩写符号简要说明”。

(54) Title: SCROLL PLATE AND MANUFACTURE METHOD THEREOF

(54) 发明名称: 涡旋盘及其制造方法



(57) Abstract: A scroll plate comprises a orbiting scroll plate and a fixed scroll plate consisted of plate bodies and corresponding end plates; one of the orbiting scroll plate and the fixed scroll plate is made of metal materials, the other is made of nonmetal materials with elasticity and plasticity property, the two scroll plates are sealed and compensated each other in axial and radial direction during orbiting cooperatively by making use of characteristic of materials. In order to convert the original linearly contact of the two scroll plates into surface contact, a scroll plate according to the invention is made of elastic and plastic materials, thus, sealing is achieved by extrusion through materials distortion. At the same time, the two scroll plates are made by modeling so that mechanism process and surface stiffen process are omitted, and the rigidity of oxidation film formed in the surface of workpiece is increased. Additionally, because the two scroll plates are made of soft and hard materials respectively, the requests of precision and contour tolerance in scroll plates are reduced during orbiting cooperatively, accordingly reducing manufacture costs, noises and vibration, also making performance of anti-abrade better and prolonging life of use.

[见续页]



WO 2004/104421 A1